

## Selection for cacao resistance to Moniliasis assisted by molecular markers

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The basidiomycete *Moniliophthora roreri*, the causal agent of moniliasis, occurs in many cocoa producer countries in South and Central Americas, but not yet in Brazil. The disease can cause losses of up to 90% in cocoa production, have difficult control and, given its proximity to the border with Brazil, it threatens Brazilian cocoa production. As part of a preventive breeding program, this study aims to identify parental germplasms to be involved in crosses aiming the development of varieties resistant to moniliasis and then select individual trees carrying the QTLs of resistance, assisted by markers. In order to do that, genomic DNA was extracted from 34 clones of CEPEC's cacao breeding program with good agronomic characteristics and others with known resistance moniliasis and with QTLs mapped. Genomic DNA was extracted according to Doyle & Doyle (1991). Subsequently the DNA was amplified by PCR using primers close to the resistance genes, submitted to the SSR gel and silver stained. It was observed that some parental clones (Sca-6, Salobrinho-3, CP-184, CP-188), even being susceptible, carry the alleles of resistance in the marker loci and so should be avoided as parent in the marker assisted selection program.

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